AMENDMENTS TO CLAIMS

1. (Currently Amended) An emulsion useful in providing water-resistance to a gypsum product, comprising:

at least one wax;

an alkyl phenol;

polynaphthalensulfonic acid;

an alkali metal hydroxide;

water; and a complexed starch;

wherein the alkyl phenol is a C_{24}-C_{34} polymerized ~~methylene coupled~~ methylene-coupled alkyl phenol.

2. (Original) The emulsion of claim 1 wherein the alkali metal hydroxide is selected from the group consisting of sodium hydroxide and potassium hydroxide.

3. (Cancelled)

4. (Original) The emulsion of claim 1 wherein the complexed starch is a complex or a starch and a complexing agent selected from the group consisting of a borate compound, a molybdate compound and a molybdenum compound.

5. (Original) The emulsion of claim 4 wherein the complexing agent is sodium tetraborate decahydrate.

6. (Original) The emulsion of claim 4 wherein the starch is selected from the group consisting of unmodified starch, acid-modified starch, hydroxyethylated starch, oxidized starch, and cationic starch.

7. (Original) The emulsion of claim 4 wherein the starch is acid-modified starch.

8. (Original) The emulsion of claim 4 wherein the ratio of the complexing agent to the starch on a weight per weight basis is from about 1:4 to about 1:20.

9. (Currently Amended) A method for making an emulsion useful in providing water-resistance to a gypsum product, comprising the steps of:

(a) at least one wax and an alkyl phenol to provide a first pre-mix;

(b) mixing polynaphthalenesulfonic acid, an alkali metal hydroxide, water, and a complexed starch to provide a second pre-mix;

(c) combining the first pre-mix and the second pre-mix to provide a mixture; and

(d) homogenizing the mixture;

wherein the alkyl phenol is a C_{24} - C_{34} polymerized ~~methylene-coupled~~ methylene-coupled alkyl phenol.

10. (Original) The method of claim 9 wherein the alkali metal hydroxide is selected from the group consisting of sodium hydroxide and potassium hydroxide.

11. (Original) The method of claim 9 wherein steps (a) and (b) further comprise heating the first pre-mix and second pre-mix to a temperature range of about 185 °F to about 195 °F.

12. (Original) The method of claim 9 wherein step (d) is carried out at a pressure of at least 3500 psi.

13. (Cancelled)

14. (Original) The method of claim 9 wherein the complexed starch is a complex of a starch and a complexing agent selected from the group consisting of a borate compound, a molybdate compound and a molybdenum compound.

15. (Original) The method of claim 14 wherein the complexing agent is sodium tetraborate decahydrate.

16. (Original) The method of claim 14 wherein the starch is selected from the group consisting of unmodified starch, acid-modified starch, hydroxyethylated starch, oxidized starch, and cationic starch.

17. (Original) The method of claim 14 wherein the starch is acid-modified starch.

18. (Original) The method of claim 14 wherein the ratio of the complexing agent to the starch on a weight per weight basis is from about 1:4 to about 1:20.

19. (Currently Amended) An emulsion useful in providing water-resistance to a gypsum product, comprising;

at least one wax in an amount of about 25% to about 40% by weight based on the total weight of the emulsion;

a saponifiable wax in an amount of about 2.5% to about 4.5% by weight based on the total weight of the emulsion;

an alkyl phenol in an amount of about of about 0.25% to about 10.0% by weight based on the total weight of the emulsion;

a polynaphthalenesulfonic acid in an amount of about 0.25% to about 5.0% by weight based on the total weight of the emulsion;

water in an amount of about 55% to about 65% by weight based on the total weight of the emulsion;

an alkali metal hydroxide in an amount or about 0.5% to about 1.5% by weight based on the total weight of the emulsion; and

a complexed starch, in an amount of about 1.5% to about 3.5% by weight based on the total weight of the emulsion, the complexed starch comprising a starch and a complexing agent selected from the group consisting or a borate compound, a molybdate compound and a molybdenum compound, the starch and the complexing agent having a ratio, by weight, of about 4:1 to about 20:1;

wherein the alkyl phenol is a C_{24} - C_{34} polymerized ~~methylene coupled~~ methylene-coupled alkyl phenol.

20. (Previously Prescnted) A gypsum product comprising gypsum and the emulsion of claim 1.

21. (Previously Presented) A gypsum product comprising gypsum and the emulsion of claim 19.

22. (Previously Presented) A method for imparting water-resistance to a gypsum product comprising the addition to a gypsum product of an emulsion of claim 1.

23. (Previously Presented) A method of imparting water resistance to a gypsum product comprising the addition to a gypsum product of an emulsion of claim 19.